



PATENT
Attorney Docket No. 10995-2330

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Juro Ozeki et al.) Group Art Unit: 1796
Application No.: 10/524,135) Examiner: Patrick Dennis Niland
Filed: April 5, 2006)
For: Polyphenylene Ether Based Resin) Confirmation No.: 2415
Composition)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RULE 132 DECLARATION

I, TORU YAMAGUTI, do hereby declare that I am one of the inventors of the above-identified application and that I am a citizen of Japan. That I graduated from Chiba Institute of Technology, Faculty of Engineering, Course of Industrial Chemistry in March 1990. That I have been employed by Asahi Kasei Chemicals Corporation, a Japanese Corporation and the assignee of record of the above-identified application, since October of 1990. That since that time I have been principally engaged in research activities relating to the development of polyphenylene ether resin compositions.

I am familiar with the history of prosecution of this application and specifically the Examiner's opinion that the claims are unpatentable under 35 U.S.C. §103(a) for being obvious over Shiraki et al., in view of Coran et al.

To show that the claimed invention relating to a polyphenylene ether based resin composition comprising (a) from 10 to 93% by weight of a polyphenylene ether based

resin and optionally a styrene based resin, (b) from 2 to 20% by weight of a styrene based thermoplastic elastomer modified with an imidazolidinone compound, and (c) from 5 to 60% by weight of a clay that has been surface treated with a silane compound. Is not obvious in view of these references, I conducted a number of experiments as set forth in the attached Appendix consisting of two pages. These experiments compare the properties of mixtures of polyphenylene ether, a thermoplastic elastomer and a clay. For a description of the elastomers b-1 and b-3 and the clay c-2 in the Table of the Appendix, see page 18, line 8 to page 20, line 9 of the specification. Example 1 and Comparative Example 1 are repeated from Table 1 on page 22 of the specification. The Graph of the Appendix is a plot of six Examples.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: Nov. 11. 2009

Toru Yamaguti
TORU YAMAGUTI

Additional Experimental Data (Examples A and B and Comparative Examples A and B)

	Unit	Example A	Comparative Example A	Example 1	Comparative Example 1	Example B	Comparative Example B
Polyphenylene ether: a-1	%	84.9	84.9	71.4	71.4	33.3	33.3
Thermoplastic elastomer: b-1 b-3	%	3	3	5.5	5.5	16.6	16.6
Inorganic filler: c-2	%	11	11	22	22	49	49
Aromatic phosphoric ester based flame retarder: d-1:	Part	11	11	11	11	11	11
BHT	%	1.1	1.1	1.1	1.1	1.1	1.1
Total		111	111	111	111	111	111
IZOD impact value	J/m	196	104	108	39	90	53
Drop impact strength	J	48	33	44	14		
Elongation at break	%	100<	18	100<	8	26	7
Flexural modulus	MPa	2740	2700	3800	3800	3090	3110
Gloss		95	70	88	50	84	52

